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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/006,608	11/30/2001	Michael Neal	DEM1P008	1143

36088 7590 11/16/2006

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EXAMINER	
HEWITT II, CALVIN L	
ART UNIT	**PAPER NUMBER**
3621	

DATE MAILED: 11/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/006,608	NEAL ET AL.	
	Examiner	Art Unit	
	Calvin L. Hewitt II	3621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 September 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 3-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 3-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Status of Claims

1. Claims 1 and 3-27 have been examined.

Response to Amendments/Arguments

2. Applicant is of the opinion that the combined prior art does not teach Applicant's claimed apparatus and method. Specifically, Applicant asserts that the prior art does not teach "relaxing constraints" [claims 1, 14, 22, and 23], "displaying and setting prices" [amended claim 22], "selecting products that have had a change in state... and products that have constraints enabling price movement" [amended claim 16] and "resolving errors" [claim 27]. The Examiner respectfully disagrees with Applicant's analysis.

Initially, claims 1, 3-13 and 26 are directed to an apparatus. It has been held that while features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function alone (MPEP 2114; *In re Swineheart*, 169 USPQ 226; *In re Schreiber*, 44 USPQ2d 1429 (Fed. Cir. 1997)). Hence, as intended use "computer code" does not further limit a structure, the computer of Ouimet et al. ('641, figure 1) for example, is sufficient for teaching Applicant's claimed apparatus. Ouimet et al. also teach displaying optimized prices and

setting store prices according to the displayed optimized price ('641, column 1, lines 65-67; column 2, lines 12-17). Regarding, the selection of a subset of products, Hartman et al. teach product subsets being determined by "experienced retailers" who have a "good feel for the price sensitivity of items" in a product line ('425, column 5, lines 48-64). It has been held that in order for a new combination of old elements to be patentable, the elements must cooperate in such manner as to produce a new, unobvious, and unexpected result (*In re Venner*, 120 USPQ 192 (CCPA 1958); *In re Smith*, 73 USPQ 394). It has also been held that it is not 'invention' to broadly provide a mechanical or automatic means to replace manual activity which has accomplished the same result (*In re Venner*, 120 USPQ 192 (CCPA 1958); *In re Rundell*, 9 USPQ 220). Therefore, it would have been obvious to one of ordinary skill to automate the subset selection process of Hartman et al. using a well known computer algorithm such as integer programming (IP) (Note it is inherent to the solution of an IP problem to "relax" the integer constraint in order to convert the IP problem to a more solvable LP or linear programming problem). Claims 16 and 27 are directed to subject matter that may or may not occur. For example, there are no guarantees that stores have closed, records are missing or that products have had a change in information state, hence these features cannot distinguish the claims from the prior art (MPEP, 2106, II, C; *In re Johnston*, 77 USPQ2d 1788 (CA FC 2006)).

Applicant also asserts that Hartman et al. is not combinable with Ouimet et al. and Delugio et al.. However, each of the prior art references are directed to price optimization ('352, abstract; '425, abstract; '641, abstract) and the Examiner contends that it would have been obvious to one of ordinary skill to allow users of the Ouimet et al. system to perform price optimization remotely and create subsets of products in order to provide a grocery chain (e.g. Giant, Safeway) a method for managing prices at multiple stores ('352, column 7, lines 14-43) and better optimize prices by grouping products according to price sensitivity ('425, column/line 2/55-3/26).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 26 and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The terms "obvious" and "unusual" in claims 26 and 27 are relative terms which renders the claims indefinite. The terms "obvious" and "unusual" are not defined by the claim, the specification does not provide a standard for

ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1, 3-13 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ouimet et al., U.S. Patent No. 6,094,641.

As per claims 1, 3-13 and 26, Ouimet et al. teach an apparatus comprising a computer readable media that can be used for calculating a preferred set of prices for a plurality products or a subset of said plurality (figure 2).

7. Claims 14-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ouimet et al., U.S. Patent No. 6,094,641 in view of Hartman et al., U.S. Patent No. 5,987,425 and Delurgio et al., U.S. Patent No. 6,553,352.

As per claims 14-27, Ouimet et al. teach a computer implemented method for computing a preferred set of prices comprising the storing of initial prices of a plurality of products (column 3, lines 1-13), creating a

demand model for generating said prices (figures 3-4B; column 3, lines 1-13), displaying optimized prices and setting store prices according to the displayed optimized price (column 1, lines 65-67; column 2, lines 12-17). Ouimet et al. also teach that an advantage of their system is that any demand model can be used (column 1, lines 59-62) hence, it would have been to one of ordinary skill to use a model derived from Bayesian statistics. Ouimet et al. do not explicitly recite dividing products into subsets. Hartman et al. teach deriving optimal prices for a plurality of products by dividing subsets according to department and price sensitivity (abstract; figure 5; column/line 2/57-3/49; column/line 4/35-5/25). Regarding, the selection of a subset of products, Hartman et al. teach product subsets being determined by "experienced retailers" who have a "good feel for the price sensitivity of items" in a product line ('425, column 5, lines 48-64). It has been held that in order for a new combination of old elements to be patentable, the elements must cooperate in such manner as to produce a new, unobvious, and unexpected result (*In re Venner*, 120 USPQ 192 (CCPA 1958); *In re Smith*, 73 USPQ 394). It has also been held that it is not 'invention' to broadly provide a mechanical or automatic means to replace manual activity which has accomplished the same result (*In re Venner*, 120 USPQ 192 (CCPA 1958); *In re Rundell*, 9 USPQ 220). Therefore, it would have been obvious to one of ordinary skill to automate the subset selection process of Hartman et al. using a well known computer algorithm such as integer programming (IP) (Note it is inherent

to the solution of an IP problem to "relax" the integer constraint in order to convert the IP problem to a more solvable LP or linear programming problem). However, neither Ouimet et al. nor Hartman et al. explicitly recite sending sales data to a server. Delurgio et al. teach sending product sales data to a server in order to receive optimized prices for said products or a subset of said products (abstract; figures 2, 11 and 12; column 7, lines 14-60). Ouimet et al. does not specifically recite demand models based on Bayesian statistics. On the other hand, Ouimet et al. teach that an advantage of their system is that any demand model can be used (column 1, lines 59-62). Delurgio et al. also teach demand models derived using Bayesian statistics (column 8, lines 10-25). Therefore, it would have been obvious to one of ordinary skill to combine the teachings of Ouimet et al., Hartman et al. and Delurgio et al. in order to provide a grocery chain (e.g. Giant, Safeway) a method for managing prices at multiple stores ('352, column 7, lines 14-43) and better optimize prices by grouping products according to price sensitivity ('425, column/line 2/55-3/26).

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Calvin Loyd Hewitt II whose telephone number is (571) 272-6709. The Examiner can normally be reached on Monday-Friday from 8:30 AM-5:00 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Andrew Fischer, can be reached at (571) 272-6779.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see

http://pairdirect.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Calvin Loyd Hewitt II
Primary Examiner

November 12, 2006